

# Coversheet: Rules for auctioning in the New Zealand Emissions Trading Scheme

Advising agencies	Ministry for the Environment
Decision sought	Approval
Proposing Ministers	Hon James Shaw, Minister for Climate Change

## Summary: Problem and Proposed Approach

**Problem Definition**

**What problem or opportunity does this proposal seek to address? Why is Government intervention required?**

The New Zealand Emissions Trading Scheme (NZ ETS) is the Government’s key policy tool for reducing greenhouse gas emissions. The Government needs to manage the number of units supplied into the scheme so aligns with our emissions budgets and climate change targets.

Cabinet has agreed to amend the Climate Change Response Act 2002 (CCRA) [CAB-17-MIN-0547.01 refers], to enable an overall limit on the emissions covered by the NZ ETS. This will be done by restricting or ‘capping’ the number of emissions units (known as New Zealand Units (NZUs)) within the scheme. Over time the cap will be reduced, which will constrain emissions in New Zealand. The Climate Change Response (Emissions Trading Reform) Amendment Bill (the Bill) was introduced to the House on 24 October 2019. The Bill will implement a cap on the supply of NZUs and introduce auctioning in the NZ ETS.

Auctioning will be a key component of capping the emissions covered by the NZ ETS. It will allow the Government to ration the unallocated portions of New Zealand’s future emissions budget, and manage the supply of units entering the domestic carbon market. Along with units from forestry sequestration, industrial allocation and other removal activities<sup>1</sup>, auctioning will become a critical source of NZUs for participants to meet their obligations under the scheme.

The analysis in this RIS focuses on how the auctioning system will operate. Cabinet has already agreed to the high-level design of the auctioning system [CAB-18-MIN-0606.01 refers]. Auctioning in the NZ ETS will use a sealed bid, single-round, uniformly priced format, have the flexibility to run auctions either monthly or quarterly and will enable all NZ ETS Registry account holders, who meet registration criteria, to participate in the auctions.

Further decisions are now needed on the rules that set out how auctioning will operate. The proposals in this Impact Statement will set regulations to define the rules for auctioning in the NZ ETS, including:

- scheduling auctions and how volume will be managed across auctions;

<sup>1</sup> The cost containment reserve and international units are additional sources of supply in the NZ ETS. However, units from the cost containment reserve will only be available if prices are unacceptably high during auction. Furthermore, there will be a limit on the number of international units that can be used. The Government has proposed that no international units will be used in the NZ ETS during the first emissions budget period.

- how price controls will operate within auctioning;
- what is needed to prepare for auctions; publishing auction notices, registering bidders and processing collateral;
- what bidding rules are required for auctions; and
- how to define the approach to settle successful bids and report on auction results.

### **Summary of Preferred Option or Conclusion (if no preferred option)**

#### **How will the agency's preferred approach work to bring about the desired change? Why is this the preferred option? Why is it feasible? Is the preferred approach likely to be reflected in the Cabinet paper?**

The proposed rules for auctioning will operationalise Cabinet's earlier decision on the auctioning format (sealed bid, single-round, uniformly priced) and frequency (flexibility to hold monthly or quarterly auctions).

In a sealed bid, single round auction format bidders will submit bids simultaneously. Every 'bid' states the price and quantity of NZUs being sought in the auction. Bids are then ranked from highest to lowest price.

The market clearing price is determined by working out the point at which the available supply of NZUs intersects the total volume bid for, when ranked by price. Each successful bidder receives the quantity bid at prices at or above the clearing price. Uniform pricing means that all bidders pay the same clearing price, rather than the actual price they bid. In this case, the price will be the lowest successful bid price. The last successful bid matching the clearing price may only receive part of the volume bid for, depending on the remaining volume.

Flexibility in the auction schedule is needed to allow the system to adapt to changing circumstances. Regulations will therefore be set to specify the auction frequency may be either monthly or quarterly. However, a schedule of auction dates and the volumes available for the year needs to be published well ahead of time to ensure certainty for the market and enable prospective bidders to plan ahead. For this reason, we initially propose to schedule auctions quarterly. However, given the dependency of this decision on auction volumes that have not yet been decided, this proposal will only be confirmed after final decisions on the NZ ETS proposed settings are taken later in the year<sup>2</sup>.

#### **Overall rules for scheduling auctions and managing volume across auctions**

Each year the auction volumes for the following year will be announced through an auction calendar. The auction calendar will be published no later than September each year (except in the first year if regulations are not implemented by September). Auctions will be held on weekdays that are not public holidays, regional anniversary holidays, and do not fall between Christmas Eve and the day after New Year's day. Where practicable, auctions will not be held on known dates of major announcements that could affect the NZ ETS market. Auctions will be scheduled no closer than 20 working days before the NZ ETS compliance deadline.

Once scheduled, auctions cannot be cancelled, but may be postponed in exceptional circumstances, such as a force majeure event that prevents the auction operator from

<sup>2</sup> The number of units being allocated for auctioning form part of the NZ ETS proposed settings regulations, public consultation, which concluded on 28 February 2020. It is expected that Cabinet decisions will be sought in May 2020 on (i) proposals to set overall limits and price control settings in the NZ ETS, (ii) an indicative schedule for auctioning; and (iii) a start date for auctioning.

starting or completing the auction, or if the auction platform is unavailable to bidders during the bidding window. If an auction is postponed then it must be rescheduled as soon as reasonably practicable. The new auction date must be published as soon as possible and communicated to bidders who had registered for the postponed auction. On the day an auction is scheduled, the auction bidding window will be open for three hours from 9am to 12 noon.

The Government recently consulted on a provisional emissions budget for the period 2021 to 2025. This budget sets the auction volume for this period at 80 million NZUs. It has also proposed that a trial auction could be held in late 2020 with a volume of 2 million units. Table 1 shows the annual auction volumes for 2020 and the provisional emissions budget period, and the value of these units at a carbon price of \$25 per NZU.

*Table 1: Proposed annual auction volumes (2020 -2025)*

	2020	2021	2022	2023	2024	2025	Total
Proposed auction volume (million NZUs)	2.0	17.6	17.9	16.3	14.7	13.2	82
Value of auction volume at \$25 per NZU (million \$)	50	440	448	408	368	330	2,050

The total value of the auction volume is unknown at this point as the emissions price will change throughout this period.

It is proposed that the annual auction volume will be evenly distributed across the scheduled auctions in a year. Unsold units will be added to the next auction, except in the final auction of the year.

### **Operation of price controls within auctions**

Two price controls will operate within the auctioning system: a cost containment reserve (CCR) and an auction price floor. Regulations are needed to define how price controls will work in practice within the auctioning system.

A CCR is a mechanism that releases NZUs, which have been held in reserve by the Government, into the market if prices become unacceptably high. The CCR will operate within a scheduled auction. If the clearing price at a scheduled auction goes above the level of a price trigger (or triggers), a pre-established volume of NZUs will be released from the CCR into the auction to meet demand. The CCR will be activated by either a single price trigger or multiple triggers, depending on final decisions on NZ ETS settings. The level of the price triggers will be set in regulation, and are currently being considered by the Government.

The auction price floor will set a minimum price in which the Government can sell NZUs. No further rules are required to make a price floor operational within NZ ETS auctions once the value of the price floor has been set in regulations.

### **Preparing for auctions: auction notices, registration process and provision of collateral**

The auction operator will publish an auction notice a minimum of 30 calendar days prior to the auction date. The notice will confirm the date and time of the auction, the number of NZUs available (which may include unsold volume from a previous auction), any price controls, and whether there is a technical auction reserve price.

Prospective bidders will need to register their details and meet specific criteria before participating in auctioning. The auction operator will collect and verify registration information before an auction. Bidders will also be required to provide collateral to participate in auctioning.

### **Bidding rules during an auction**

The bidding rules specify what types of bids can be accepted during an auction and how these bids should be treated in certain circumstances. This includes a minimum bid size of 500 NZUs, a minimum lot size of 100 NZUs, \$0.05 as the minimum price increment for bids, and rules for resolving tied bids via a pro rata methodology. No maximum bid limit will be set.

### **Settlement approach and reporting auction results**

Settlement refers to the process whereby successful bidders pay for the bids they have won and then the correct amount of NZUs are transferred to the bidder's Registry account. We propose a payment before delivery approach be used for auctions in the NZ ETS and that the maximum settlement time should be four working days. Under this approach payment must be made and cleared before NZUs won in the auction are transferred to the bidder's account.

Once the auction has taken place, the auction results must be notified to the successful bidders and the wider market. Some results can be released shortly after the auction while others can only be released to the market later when further analysis has been done. We propose that information be published as soon as practicable after the auction.

## **Section B: Summary Impacts: Benefits and costs**

### **Who are the main expected beneficiaries and what is the nature of the expected benefit?**

The key beneficiaries and benefits are outlined here for the proposals.

#### *Bidders*

A well-functioning auctioning system will support individuals and businesses to purchase NZUs directly from the Government if they choose to participate in auctions. This is another possible source of supply, over and above free allocations and the existing NZ ETS secondary market, to people who may need NZUs to meet compliance obligations.

### *NZ ETS market participants*

Holding well-regulated and transparent auctions will benefit the entire NZ ETS market, as a successful auctioning system will contribute to the integrity of the scheme, provide an additional source of supply to the market, and give certainty to the market that unit supply decisions efficiently align with emissions budgets under the overall NZ ETS cap.

#### *Government*

Implementing the auctioning platform is required to enable the Government to manage the number of units supplied into the NZ ETS so it is in line with our emissions budgets and climate change targets. The auction volume is taken from the emissions budgets New Zealand will set under the Zero Carbon Act. A well-regulated auctioning system ensures the integrity of the NZ ETS and will support Government to meet both its domestic and international climate change targets.

Auctioning will also provide an ongoing source of cash to the Crown. The consultation on NZ ETS settings proposes a provisional emissions budget for New Zealand covering the period 2021-2025 in which 80 Mt CO<sub>2</sub>-e has been set aside for auctioning. This would equate to 80 million NZUs with a total value of \$2 billion at a carbon price of \$25. A trial auction may be held in late 2020, if the auctioning system is operational. 2 million units have been proposed for sale. This would increase the auction volume to 82 million NZUs and the potential proceeds to \$2.05 billion.

#### *Public*

Implementing the auctioning platform is required to enable the Government to manage the number of units supplied into the NZ ETS so it is in line with our emissions budgets and climate change targets. The long-term benefit to New Zealand is that the Government has the right tools to manage the cap on the ETS and begin the transition to a low-emissions, climate resilient economy at the most efficient economic cost.

### **Where do the costs fall?**

These proposals are required to implement previous Cabinet decisions, consequently funding is already in place to develop the auctioning platform that will operate according to these rules. The cost of developing and operating the auctioning platform falls on central Government and a procurement process to select an auction platform operator is currently underway.

The exact cost of building and operating the auctioning platform will only be known once the auction operator tender process is complete. However, in Budget 19' \$1.303 million was appropriated to establish and build the auctioning platform, and \$1.646 million per annum to operate the system.

There will be no direct charge to NZ ETS participants to bid in auctions. Currently, there is no cost to open an account in the New Zealand Emissions Trading Register. There will also be no cost to use the auction platform. However, participants will face indirect participation costs as a result of these regulations, such as those associated with registering to participate in auctions and in providing collateral in order bid.

It is proposed that a minimum bid size of 500 NZUs is implemented. Assuming a carbon price of \$25, the minimum cost of purchasing NZUs at an auction would be \$12,500. Bidders

will be required to provide collateral equal to 25 per cent of their bid. This would mean that the minimum cost of collateral will be \$3,125 (again assuming a carbon price of \$25).

### **What are the likely risks and unintended impacts? how significant are they and how will they be minimised or mitigated?**

The rules for auctioning specify the design of an auctioning system prior to final decisions being taken on the volume of NZUs that will be available for sale by auction and relevant values of price controls. It is possible that once those decisions are made the combination of rules proposed here and the NZ ETS settings may have unintended consequences, or require these regulations to be revisited. However, this risk is mitigated by the fact that the settings decisions are in progress now and the Government is working to align both as far as possible.

The Government has indicated that auctioning will start at the end of 2020 or the beginning of 2021. There is a risk that if these decisions are not taken now, the start date for auctioning could be delayed due to the time needed to draft and enact these new regulations.

The decisions being considered in this Impact Statement are to enact regulations, not to amend the primary legislation (the CCRA). This allows flexibility to respond to changing circumstances (such as future unit supply decisions), mitigating the risk of needing to reverse decisions in the future.

Decisions are needed now to enable auctioning to begin in late 2020 or early 2021, even though the enabling provisions for these regulations have not yet been enacted in the CCRA. Any changes to these enabling provisions, or delays to enactment may impact these regulations or delay the start of auctioning. There are currently no proposals to amend these provisions in the Bill.

## **Section C: Evidence certainty and quality assurance**

### **Agency rating of evidence certainty?**

There is limited evidence to draw from to assess the impacts of the proposed rules for auctioning. This is to be expected, considering this will be the first time auctioning has been used within the NZ ETS. New Zealand undertook research on auctions conducted by mature and well-established emissions trading schemes of other jurisdictions; including the EU ETS, the Regional Greenhouse Gas Initiative<sup>3</sup>, and the Western Climate Initiative (WCI). The WCI run joint auctions for the emission trading schemes of the States of California and Québec. The design of WCI auctioning is similar to the preferred design of the NZ ETS auctioning mechanism, which provided useful learnings for New Zealand. However, these schemes are qualitatively different to the NZ ETS. When looking at auctioning in these jurisdictions we were sensitive to the key differences.

We also looked at non-emissions trading auctioning systems for the sale of Crown assets in New Zealand; including the electricity wholesale market, the auctioning of radio spectrum and auctioning systems for fishery quotas (some of which span the secondary market as well).

*To be completed by quality assurers:*

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<sup>3</sup> RGGI is a mandatory cap-and-trade program in the United States for the power sector, and run joint auctions.

**Quality Assurance Reviewing Agency:**

Ministry for the Environment Regulatory Impact Assessment Panel

**Quality Assurance Assessment:**

The quality assurance panel has reviewed the Regulatory Impact Assessment (RIA) and considers it meets the Quality Assurance criteria.

**Reviewer Comments and Recommendations:**

The Panel considers the RIA provides an adequate description of the proposed changes being considered within the context of wider changes to the Emissions Trading Scheme (ETS) and provides a clear summary of the potential scale of these changes by quantifying the volume and value of ETS auctioning. We are satisfied that sufficient consultation has taken place around the options, and, where appropriate the public's concerns have been addressed.

Given the relatively narrow scope of the regulations and that an auctioning system is new to the New Zealand ETS, and only used in a small number of other jurisdictions, quantified information on the costs and benefits of the proposals is relatively limited. However, the panel is satisfied that the assessment includes the available information.

# Impact Statement: Rules for auctioning in the New Zealand Emissions Trading Scheme

## Section 1: General information

### 1.1 Purpose

This RIS provides analysis on the impacts of the different rules for auctioning.

The Ministry of the Environment is solely responsible for the analysis and advice set out in this Regulatory Impact Statement, except as otherwise explicitly indicated. This analysis and advice has been produced for the purpose of informing final decisions to proceed with a policy change to be taken by or on behalf of Cabinet.

### 1.2 Key Limitations or Constraints on Analysis

We are confident with our scoping of the problem, the evidence base, the range of options considered, the criteria used to assess options, and the underlying assumptions and quality of data.

The Government has already agreed to the high-level design of the auctioning system. During consultation on the *Rules for Auctioning* some submitters advocated for some of these decisions to be revisited; however, we consider the fundamental design of auctioning to be settled and therefore out-of-scope of this assessment.

There are some timing constraints for this analysis, as legislative changes to the CCRA and regulations to implement the proposals are being progressed together as a package.

The Climate Change Response (Emissions Trading Reform) Amendment Bill (the Bill), which enables the Government to set a cap on emissions covered by the NZ ETS, and make other improvements to the operation of the scheme, was introduced to Parliament in October 2019 and is currently with the Environment Select Committee.

Many of the amendments to the NZ ETS specified in the Bill will require implementation through regulations. Consultation on a range of regulations has been occurring alongside the legislative process for the Bill, including on NZ ETS settings and on operational details for auctioning.

In particular, auctioning regulations for operational details needed to be developed and consulted on alongside other unit supply decisions for the NZ ETS. In December 2019, public consultation opened for proposals to set unit supply in the NZ ETS on a five-year rolling basis. Volumes available for auctioning have formed part of this consultation.

Policy decisions covered by this Impact Statement are largely operational in nature, and are about the design of the auction system, rather than the volumes that are being auctioned. However, it is important to design an auction system in a manner that is consistent with the wider policy intent of the NZ ETS and other decisions being taken on unit supply settings. So while unit supply decisions are not within the scope of this assessment, some of these settings (specifically auction volumes and some price control settings) will have a material impact on the operation of the auctioning system.



There is also little evidence to draw on to assess the impacts of the proposed auctioning rules. Other jurisdictions auction emissions units; however, differences between the NZ ETS and overseas emissions trading schemes make it difficult to apply overseas experiences within New Zealand (for example our ETS has a large number of small participants with limited experience in markets, and the secondary market will remain a significant source of NZUs for many participants).

Because of the novelty of the proposal to introduce auctioning in the NZ ETS we have relied on the criteria in Section 2 of this Impact Statement to assess the proposed rules for auctioning.

### 1.3 Responsible Manager (signature and date):

Fraser Wyeth

Emissions Trading Scheme Markets  
Climate Directorate  
**Ministry for the Environment**

## Section 2: Problem definition and objectives

### 2.1 What is the current state within which action is proposed?

The New Zealand Emissions Trading Scheme (NZ ETS) does not currently provide for auctioning of emissions units.

The 2015/16 review of the NZ ETS found that changes were needed for the scheme to be fit-for-purpose for 2020 and beyond.

In mid-2017, the Government took an in-principle decision to introduce auctioning into the NZ ETS. The decision was taken as part of a package of amendments to improve the NZ ETS to align it with New Zealand's emissions reduction targets. It is expected that the first auction will be held in late 2020 or early 2021.

The CCRA already allows the Minister for Climate Change to sell New Zealand Units (NZUs) by auction, following the development of regulations. However, to date an auctioning mechanism has not been utilised.

Following the decision to introduce auctioning, the Ministry for the Environment established an auctioning work stream. Separate RIAs have been prepared for different aspects of the policy work that have been progressed to date.

Public consultation was held in August-September 2018 on the high-level design of the auction system (including format, frequency, eligibility to participate, and use of auction funds).

Submissions from the consultation informed analysis for Cabinet decisions taken in December 2018 on the high-level design for auctioning. It was agreed that auctions would be introduced as a single round, sealed bid auction with uniform pricing; be held quarterly or monthly; and that all NZ ETR account holders would be eligible to participate, subject to preregistration requirements.

As part of tranche two decisions on improvements to the NZ ETS in May 2019, Cabinet agreed to develop further operational decisions to enable a robust fit-for-purpose auctioning system. This included enabling an independent auction monitor to be established through regulations, and a decision to amend the CCRA to provide further clarity on the types of decisions Cabinet *may* and *must* take when creating regulations for auctioning.

In October 2019, the Government introduced the Bill to the House. The Bill is currently before Parliament and includes provisions to set auctioning regulations as specified above.

Following the introduction of the Bill, the Government has held further public consultation on the operational rules for auctioning (November-December 2019). 48 submissions were received, analysed, and the feedback incorporated into developing the proposals that are the subject of this Impact Statement.

Decisions on the auction volume and price control settings (such as the volumes and trigger price/s for the new cost containment reserve and price floor) are being considered following consultation on proposed NZ ETS settings. This consultation closed at the end of February 2020.

## 2.2 What regulatory system(s) are already in place?

### **CCRA and the NZ ETS**

The CCRA established the NZ ETS in 2008 and provides the legal framework for its implementation, operation and administration.

The NZ ETS puts a price on greenhouse gas emissions by requiring participants from all sectors of our economy to report their emissions and, with the exception of agriculture, to surrender units to the Government for their emissions. This creates a financial incentive for businesses to invest in technologies and practices that lower emissions.

The CCRA currently enables the Minister for Climate Change to sell NZUs by auction. To date, an auctioning mechanism has not been utilised. The current regulation-making power is sufficient to enable the development of an auctioning platform with the preferred high-level design options set out in this Impact Statement.

The Climate Change Response (Emissions Trading Reform) Amendment Bill provides additional regulation making powers/responsibilities of the Minister for Climate Change for auctioning, setting price controls, and the auction monitor.

### **Climate Change Response (Zero Carbon) Amendment Act**

The Act amended the CCRA to establish five-yearly emissions budgets to track New Zealand's progress in meeting new emissions reduction targets set under the CCRA. New Zealand's emissions budgets will determine the volume of the NZ ETS cap and, in turn, the volume of units that the Government can auction.

### **The existing secondary market for NZUs**

The auction system needs to work in the context of the NZ ETS, which means it must take into account the existing secondary market for spot trading of NZUs. While this is an important market it is not highly regulated.

In other carbon markets that conduct auctions the 'clearing price' at auction has typically been very close to the secondary market price. The secondary market also allows auction participants to on-sell surplus units or purchase any short-fall, if they have compliance obligations.

The volume of units sold at auction will need to consider the liquidity of the secondary market, so as to enable auction participants to effectively manage their unit balances with respect to surrender obligations.

The two markets will need to operate in a complementary manner, supporting liquidity, price discovery, transparency, and a stable and credible framework for the sale and purchase of NZUs.

## 2.3 What is the policy problem or opportunity?

An auctioning system is needed to enable the Government to supply NZUs into the domestic carbon market. Through auctioning, the Government will be able to sell units to market participants.

The auctioning system forms part of the package of reforms to the NZ ETS to cap emissions in New Zealand. These reforms will support a credible and robust scheme in the 2020s and beyond, and provide certainty to the market. Auctioning NZUs into the NZ ETS market is a key aspect of this legislative change, as it will align the supply of these units with domestic emissions reduction targets.

Regulations are needed to fully implement Cabinet's earlier decisions on the auctioning format, frequency and eligibility to participate. The rules for auctioning will be set in regulations and define how the auctioning system operates. The auctioning regulations will set:

- the auction format and frequency;
- the auction schedule and how auction volumes are managed within a year;
- how price controls operate within auctioning;
- the pre-bidding rules, including publishing an auction notices, registering bidders and collateral requirements;
- the bidding rules during auctions; and
- the approach to settle bids and report on auction results

Auctioning rules will need to be drafted into regulations before auctioning can begin. It is likely that auctioning will not start until 2021 (although a trial auction may take place in 2020 if the system is operational at this time). This means the regulations will need to be in place by late 2020.

Until the auctioning system is in place, the Government will not be able to sell NZUs to participants in the NZ ETS or other market intermediaries that trade units. This will compromise our broader efforts to cap the volume of emissions covered by the NZ ETS and meet New Zealand's emissions reduction targets. Moreover, if the implementation of auctioning is delayed, the Government will forego the potential proceeds from auctioned NZUs.

The auctioning system is also necessary to implement the new price controls established by the Climate Change Response (Emissions Trading Reform) Amendment Bill. These controls are needed to ensure the NZ ETS assists in meeting New Zealand's domestic and international climate change targets.

## 2.4 What do stakeholders think about the problem?

The key stakeholders in the NZ ETS are the voluntary and mandatory participants in the scheme. Ultimately all New Zealanders have a stake in the success of the NZ ETS as it is the Government's key tool to reduce emissions and the economic costs imposed by the scheme are borne across the economy.

In terms of the rules for auctioning, the primary stakeholders are NZ ETS registered account holders who may wish to bid at auction, as well as market intermediaries and the auction operator.

Consultation on the high-level design options for auctions was undertaken as part of the consultation on *Improvements to the NZ ETS* held in August and September 2018. Submissions from this consultation informed the original Cabinet decisions on auction format, frequency and participation.

Submissions were received from 253 submitters from a range of sectors. There was clear, though not majority, support for the preferred auction format (45 per cent supported the preferred auction format, while 35 per cent supported the introduction of auctioning but preferred a different auction format).

Subsequently, public consultation on the proposed rules for auctioning in the NZ ETS was conducted in November and December 2019. Prior to the consultation document being finalised, officials held an early engagement workshop on design options with a targeted group of stakeholders. The discussion helped refine policy thinking ahead of public consultation.

As a result of the public consultation, 47 submissions were received from a wide range of stakeholders, the majority of whom were either ETS participants or actively involved in the NZ ETS market. One submission was received from a submitter who identified as iwi/Māori.

Stakeholders in general expressed support for the approach the Government is taking to develop regulations for auctioning. There was majority support for a significant number of the Government's preferred proposals, with a range of views expressed on some of the more technical proposals. A small number of forestry participants expressed concerns that auctioning would undermine the integrity of the NZ ETS.

Further details on submitter views on individual proposals are included in Appendix 1.

## 2.5 What are the objectives sought in relation to the identified problem?

The overall objective for introducing auctioning into the NZ ETS is to provide the Government with a tool for aligning units supplied into the scheme with New Zealand's climate change targets. The auctioning rules should support a well-functioning auctioning system that can meet this objective. To do this the auctioning rules should:

- Improve regulatory certainty and predictability;
- Help align the NZ ETS with New Zealand's targets; and
- Be consistent with the broader NZ ETS design policy intent.

## Section 3: Option identification

### 3.1 What options are available to address the problem?

The rules for auctioning will give effect to Cabinet's early decisions on the high-level design of auctioning.

The operational options generally fall into the three stages: pre-bidding, bidding, and post-bidding. These include pre-registration requirements to participate in the auction, bidding rules, settlement processes, and the release of auction results to successful bidders and the wider market. In addition, operational rules govern how volumes are managed within the scheduled auctions in a calendar year, including decisions on how to distribute volume across individual auctions and rules to address unsold lots.

For most of the auctioning rules the Government consulted on in late 2020, the Government's preferred options have remained unchanged – with the exception of the preferred format of the CCR. During consultation the preferred CCR format was a separate CCR auction with open participation. The Government now prefers releasing NZUs from the CCR directly into the scheduled auction that triggered the reserve. We have revised the impact analysis based on submitters' feedback and additional analysis.

#### **Overall rules for scheduling auctions and managing volume across auctions**

##### *Auction schedule*

Proposed rules for scheduling auctions will be set regarding when auctions are held in a calendar year and how participants are notified. It is proposed that the auction calendar will be published annually, no later than the end of September of the previous year and that auctions will be scheduled to avoid public and regional holidays, days when announcements are planned that may directly impact the NZ ETS market and the period directly before the compliance deadline, to give bidders time to access units on the secondary market if they are unsuccessful at auction. Auctions will only be postponed in exceptional circumstances and must be rescheduled as soon as practicable.

The above rules for the auction calendar, auction dates and postponing auctions were specifically consulted on by the Government. These were considered the only feasible and workable rules for scheduling auctions. No alternative options were therefore consulted on, but submitters did give feedback on these schedule rules.

Options were, however, presented for the auction bidding window. This included the Government's preferred option of a three hour window, 9am to 12 noon, and a bidding window longer than three hours.

##### *Managing volumes across auctions*

There are two options to manage the distribution of auction volume (i.e. the number of units that can be sold at auction in a calendar year) across scheduled auctions in a year. The auction volume can be distributed evenly over all scheduled auctions. Alternatively, the volume can be weighted so that it is distributed unevenly across auctions.

There are also different options to manage NZUs that are not sold at auction. If auction volume remains unsold, the Government can add these units to the volume for sale at the next scheduled auction. This volume can either be added to the next scheduled auction without limits (i.e. all unsold units are added to the volume for sale in the next scheduled

auction) or with some restrictions (i.e. units are still automatically rolled into the next auction, but only up to a specified limit).

### **Operation of price controls within auctions**

Price controls allow the Government to manage unacceptably low or high prices in the NZ ETS. The Government has decided to enable a price floor and price ceiling through the auctioning system.

Decisions are needed on the following set of rules to define how these price controls will work in auctioning:

- i. **Format of the CCR:** the format of the CCR determines how and when reserve units are released to the market. Reserve units can be released within the scheduled auction that triggers the CCR, or within a separate CCR auction held later.
- ii. **Single or multiple price triggers CCR:** the CCR can be activated by either a single price trigger that releases all reserve volume to the market, or multiple triggers that release tranches of the CCR to the market.

The number of CCR price triggers will be decided along with the NZ ETS unit supply and price control settings. Accordingly, these options will be assessed in a subsequent impact analysis.

No further rules are required to operationalise a price floor within NZ ETS auctions once the value of the price floor has been set in regulations. These regulations will also be set through the unit supply and price controls settings consultation.

### **Preparing for auctions; auction notices, registration process and provision of collateral**

Before an auction starts, eligible bidders will need to register and then provide information to the auction operator. Similarly the auction operator needs to provide confirmation on the details of the upcoming auction via an auction notice.

#### *Auction notice*

Before an auction begins, the auction operator will provide information to the public/potential bidders by way of a published auction notice. It is proposed the notice contains information on:

- i. the date and time of the auction;
- ii. the number of NZUs up for sale at auction;
- iii. any price controls and their value;
- iv. whether a technical reserve price is in effect;
- v. any applicable dates for pre-auction forms required; and
- vi. give notice of whether the goods are being sold by the vendor as a supplier and state that vendor bids are not permitted, as per the requirements of the Fair Trading Act 1986

### *Registering to bid*

Prospective bidders will need to register their details and meet specific criteria before participating in auctioning. It is proposed the auction operator will collect registration information, including:

- i. name of registered account holder;
- ii. registry account number;
- iii. for companies: full legal name, trading name (if different), company identifier or registration number;
- iv. principal business address or registered office address;
- v. names, contact details and relationship to the account holder for any authorised representatives of the registered account holders;
- vi. names and contact details of each person authorised to bid in an NZ ETS auction on behalf of the registered account holder.

It is proposed that the auction operator will verify that the Registry account number provided is a valid New Zealand Emissions Trading Register account and the prospective bidder is the registered account holder.

Alongside the information listed above, the applicant be required to provide a statutory declaration.

### *Rules for collateral*

Rules are needed to help to manage the risk of a winning bidder defaulting on payment. The Government could:

- i. Require bidders in auctions to provide collateral for their bids; or
- ii. Not require collateral and instead apply a non-performance penalty

The Government's preferred option is that potential bidders provide collateral. Assuming it is required, decisions are needed on the following set of rules for providing collateral:

- i. **The value of collateral:** options includes collateral as a portion of a maximum bid, requiring collateral equal to 100 per cent of the maximum bid, and a flat rate for collateral;
- ii. **Types of collateral:** the acceptable types of collateral could include cash, bank guarantee, irrevocable letter of credit, credit ranking, and NZUs;
- iii. **Lead time for collateral:** the amount of time collateral is provided before an auction; and
- iv. **Use of collateral:** there are options for how successful bidders can use their collateral funds post-auction, including allowing collateral to be used as payment towards auction units, released back to participants separate from payment of auction units, or allowing bidders to choose whether to settle their successful bids via collateral or make separate payment.

### **Bidding rules during an auction**

The bidding rules during auction specify the types of bids that can be accepted during an auction and how these bids should be treated in certain circumstances. These include rules on the minimum and maximum bid size, lot size, price increments, resolving tied



bids, and options on amending and withdrawing a bid. It also includes rules on how a technical reserve price floor would operate. The following bidding rules are proposed:

- i. **Minimum bid:** The minimum bid is the smallest number of NZUs that can be purchased at an auction. The options for the size of the minimum bid include 100 NZUs, 500 NZUs and 1000 NZUs;
- ii. **Maximum bid:** The maximum bid is the largest number of bids that can be purchased at an auction. The Government did not consult on specific maximum bid size; rather whether a maximum bid limit should be implemented;
- iii. **Lot size:** Lot size is the number of NZUs packaged in one lot for auction. The options for lot sizes include 100 NZUs, 500 NZUs and 1000 NZUs;
- iv. **Price increments:** Price increments are the amount by which bids must be increased during the bidding process per NZU. Three options for price increments were consulted on: small increments (\$0.01 to \$0.02), \$0.05 increments, and large increments (greater than \$0.05);
- v. **Resolving tied bids:** In single-round, sealed bid auctions, ties could occur when more than one bid is proposed at the clearing price, and the total amount bid at prices higher than or equal to the clearing price exceeds the volume up for sale. The options to resolve a tie include random assignment, entire bid, random assignment by lot, or resolved on a pro-rata basis; and
- vi. **Amending or withdrawing bids:** rules are needed if auction participants can amend or withdraw a bid, and when this could be done.

#### *Rules for the technical reserve price*

Decisions are needed on whether to set a technical reserve price for auctions. A technical reserve price is the lowest price that the Government would be willing to accept for NZUs during any one particular auction and is calculated relative to the secondary market price. The methodology of the TRP could be made public or kept confidential.

#### **Rules for settlement approach and reporting auction results**

##### *Settlement approach*

Settlement refers to the process whereby successful bidders pay for the bids they have won and then the correct amount of NZUs are transferred to the bidder's Registry account.

Two approaches to settlement were consulted on:

- i. **Payment before delivery:** payment by the successful bidder must be made and cleared before NZUs won in the auction are transferred to the bidder's account.
- ii. **Delivery-versus-payment:** involves a concurrent exchange of payments from the successful bidders and units from the auction operator via the central counterparty or clearing house.

##### *Reporting auction results*

Once an auction is complete, the results must be notified to the successful bidders and the wider market. It is proposed that this notification should include:

- auction clearing price;
- total volume of NZUs auctioned;

- total volume of bids;
- average bid size;
- number of bids;
- cover ratio (total volumes bid divided by total volumes for sale);
- total number of bidders and the number of successful bidders; and
- the number of unsold units, if any

### **3.2 What criteria, in addition to monetary costs and benefits have been used to assess the likely impacts of the options under consideration?**

There are different ways in which auctions can be designed, each with implications for the efficiency of the NZ ETS. The auctioning rules should support the objective of aligning units supplied into the scheme with New Zealand's climate change targets.

Five criteria are used to judge the extent to which an auction design can support the efficient operation of the scheme. The operational design of an auction should:

1. minimise administrative and transaction costs;
2. ensure consistency and proportionality;
3. support market efficiency;
4. preserve market integrity; and
5. support overall market transparency

#### **The auction design should minimise administrative and transaction costs**

- Transaction costs are incurred by bidders when registering to participate and when providing collateral. There may also be costs from settlement processes when paying for successful bids.
- Administrative costs are incurred by the Government as a result of implementing, running or overseeing the auction system.

#### **The auction design should ensure consistency and proportionality**

- **Accessibility and fairness:** all account holders in the Registry are eligible to participate in auctions. Auction design should ensure equal access for all participants, and that larger participants do not have an advantage. The benefits of a market that is sufficiently open to smaller participants must be balanced against the cost effectiveness of the system, and reduce any undue administrative burden.
- **Simplicity:** the auctioning system should be simple, easy to use and understand, so any qualifying bidder, regardless of their auctioning experience, can participate effectively.

#### **The auction design should support market efficiency**

- Auction design should minimise the opportunity for strategic bidding (i.e. situation where bidders have incentives to use strategies that reduce the clearing price). This affects market efficiency as it prevents the true value of NZUs being revealed.

- Price volatility can dampen incentives for low-emissions investment by increasing the carbon price risk. Auctions themselves should contribute little, if anything, to the volatility of prices.

#### **The auction design should preserve market integrity**

- Prevention of collusion and manipulation: Auctions should be designed to minimise opportunities for collusion between participants or for manipulation of the clearing price.
- Governance and oversight: The auctioning system should operate at a distance from the Government's role as a policy decision-maker. Rules should control the Government's release of market-sensitive information.

#### **The auction design should support overall market transparency**

Pre-auction information and results should be publicly available and accessible to all in a timely manner, while ensuring confidentiality and having regard to collusion risks.

### **3.3 What other options have been ruled out of scope, or not considered, and why?**

The high-level design of the NZ ETS auctioning system is out of scope as Cabinet has already decided on the auction format and frequency.

Auctions will use a single round, sealed bid and uniform price format. Participation will be open to all New Zealand Emissions Trading Register account holders, subject to further qualifications provided in regulations.

A final decision has not been made on the annual frequency of auctioning; however auctions will be held either monthly or quarterly.

To progress decisions on the rules for auctioning, it will be proposed that Cabinet makes an in-principle decision on auctioning frequency. A final decision will be taken later when the unit supply and price control settings are considered, along with an auction start date. The preferred option is quarterly auctions. The auction frequency and start date are therefore out of scope of this Impact Statement.

Decisions on the auction volume (the number of NZUs the Government will auction in a calendar year and emissions budget) and some price control settings (including the level of the auction price floor and price triggers of the cost containment reserve, the volume of the cost containment reserve, and the number of price triggers) are out of scope. Consultation on these settings was undertaken separately and concluded on 28 February 2020. Decisions on unit supply and price control settings will be progressed through a separate regulatory process currently underway.

The auction volume will be taken from New Zealand's first emissions budget that will cover the period 2021 to 2025. Units for the CCR will not be taken from the emissions budget. To ensure that reserve units do not exceed an emissions budget, the Government has committed to 'backing' these units by purchasing other legitimate emissions reductions.

## Section 4: Impact Analysis

### Overall rules for scheduling auctions and managing volume across auctions

#### *Auction schedule*

The auction schedule will set when auctions can be held, the duration or 'bidding window' of an auction, and what happens in the event an auction is postponed.

The consultation document *Rules for Auctioning* set out a series of common-sense decisions for the design of the auctioning schedule. Alternative options were not presented as they were considered unworkable and not appropriate for the NZ ETS. For this reason this section of the impact analysis does not weigh alternative options. Stakeholder views were sought on the detailed rules and a summary of their submissions may be found in Appendix 1.

#### *Auction calendar*

The auction calendar will be published on the Ministry for the Environment website annually and no later than the end of September. Annual publication provides advanced notice to the market and certainty as to the timing and sequence of auctions, estimated auction volumes and some price controls settings. More frequent publication of the auction calendar (i.e. two or more times in a calendar year) would reduce the predictability of the auction schedule, while infrequent publication (i.e. less than once in a calendar year) would reduce flexibility. An annual calendar is the only option that strikes a balance between certainty and flexibility.

It is vital to set the auction schedule as far in advance as possible. This will allow sufficient time for businesses to plan their bidding strategy, and for the Government and auction operator to prepare upcoming auctions. Publishing the auction calendar in September of the preceding year provides the best opportunity to maximise the predictability of the schedule, as this is the earliest possible date the Government can realistically fix/set the auction schedule. An exception will exist for the first year of auctioning (2020), as regulations may not be enacted in time to allow for a September publication date.

Auctions will be held on weekdays that are not public holidays, regional anniversary holidays and do not fall between Christmas Eve and the day after New Year's Day. This will avoid auctions taking place on dates where participation would be severely curtailed and the market is not operating normally. Some submitters supported not holding for countries where active NZ ETS market traders are located. This would be impractical and significantly complicate the auction schedule.

Furthermore, auctions will not be scheduled on a date less than 20 calendar days prior to the NZ ETS compliance deadline of 31 May. A minimum amount of time is needed between an auction and compliance deadline to ensure incoming auction volume does not disrupt the secondary market, this being a period when demand for unit supply is high. During consultation, submitters indicated that between 10 and 30 working days before the compliance deadline would be needed.

Both of these scheduling restrictions will support market efficiency.

### *Bidding window*

On the day an auction is scheduled, the auction bidding window will be open for three hours from 9am to 12 noon. Bids received after the bidding window has closed will not be accepted. This window provides enough time for participants to place their bids, yet is short enough to minimise the opportunity for collusion. This option allows for effective participation and for the results to be absorbed by the secondary market the same day.

A longer bidding window (such as an all-day window) was consulted on. We consider this option would lead to a less efficient auction process, as it would take longer for the market to discover the clearing price. It would also imply higher administrative costs for the Government, due to the need to oversee trading behaviour for a longer period of time.

### *Postponed auctions*

Circumstances may arise where an auction cannot be held/completed on the date it's scheduled. Force majeure events such as a major earthquake or extreme weather event could prevent an auction from starting or finishing. Similarly, a major failure in the auctioning IT system could also prevent the auction operator starting or completing the auction. We consider these are the only circumstances that could profoundly disrupt an auction and broadly affect participation. Isolated events that affect small numbers of participants would not have the significant disruptive impact that would justify postponement. If an auction is postponed then it will be rescheduled as soon as it is reasonable practicable, ensuring volume is supplied to the market with minimum delay. The new auction date will be published on the auction operator's website and communicated to bidders. If the auction bidding window had already opened when the auction was postponed then only bidders who had already qualified to bid in that auction will be able to bid in the rescheduled auction.

It is proposed that auctions cannot be cancelled once scheduled. The Bill will establish an overall limit (a cap) on units supplied into the NZ ETS. Auctioning will allow units supplied into the NZ ETS to be aligned with New Zealand's emissions reduction targets under the Paris Agreement and the Zero Carbon Act. Cancelling an auction would misalign the NZ ETS cap and targets, it is important that the volume of New Zealand's emissions budget set aside for auctioning be made available to the market every year. It is also necessary to ensure the Government can collect cash from the scheduled auctions in a year.

## **Managing volumes across auctions**

### *Distributing volume across a year*

	<b>Option 1: Even distribution</b>	<b>Option 2: Weighted distribution</b>
<b>Minimise administrative and transaction costs</b>	+	-
<b>Ensure consistency and proportionality</b>	+	-
<b>Support market efficiency</b>	+	-
<b>Preserve market integrity</b>	0	0
<b>Support transparency</b>	+	0
<b>Overall assessment</b>	Option 1, to distribute volume evenly across the auction schedule in a year, is preferred as it is simpler for the auction operator and market participants, and avoids disrupting the secondary market.	

The Amendment Bill establishes a five-year rolling decision making process for unit supply that will set the annual auction volume. The auction volume will be fixed for the first two years and only able to be changed in exceptional circumstances. The volume available for each auction to be held during the next calendar year will be announced during the current year in September of the current year through the auction calendar.

Two options were consulted on for managing the auction volume across a year’s scheduled auctions:

- Option 1: Even distribution over scheduled auctions
- Option 2: Weighted distribution across scheduled auctions

Option 1 is preferred. An even distribution would minimise the administrative and transaction costs of auctioning, is the simplest option for the auction operator, and provides the most clarity to market participants. A key advantage of this option is that it does not require the Government to intervene unnecessarily in market trading. It will also make it easier for participants to plan their bidding strategy well in advance of auctions.

Option 2 – a weighted distribution – would cost more to administer as it would require a process for determining and updating the weighting of volume across the year. The rationale for what the ‘weighted’ volumes would need to be provided. For example, there may be an increased volume in the auction preceding the surrender deadline, or reduced volumes during low-trading periods, such as over the Christmas summer holidays. This option would result in active intervention by the Government in market trading. This would not likely support market efficiency.

There was comprehensive support for the Government’s preferred option of even distribution, with 28 submitters agreeing and 8 opposing. Those in favour noted the simplicity and predictability of the option and recognised that not all bidders will have surrender obligations that drive demand.

Those disagreeing included four NZ ETS participants with surrender obligations who preferred weighted distribution, generally so as to align with market demand, which is not spread evenly across the calendar year. One noted a preference to align with purchasing volumes evident in the secondary market.

During consultation feedback was sought on how volumes should be weighted if the latter option was selected in preference to even distribution. Eleven responses were received. Suggestions were made for increased weighting for auctions in January-April, the months leading up to the surrender date, so as to align with market demand and to minimise carry-cost of unit holding throughout the year. One submitter noted that given the Government’s is unable to carry over volume beyond a calendar year, a reduced volume in the last quarter would avoid NZUs being removed from the market.

*Treatment of unsold NZUs*

	<b>Option 1: Unsold NZUs rolled into next auction</b>	<b>Option 2: Unsold NZUs spread across remainder of auctions</b>
<b>Minimise administrative and transaction costs</b>	+	-

<b>Ensure consistency and proportionality</b>		+	+
<b>Support efficiency</b>	market	+	+
<b>Preserve integrity</b>	market	0	0
<b>Support transparency</b>		0	0
<b>Overall assessment</b>	Option 1, unsold units are added to the next auction, is preferred. This is the simplest option with lower administration costs.		

It is possible that the full volume of NZUs available at auction is not sold. There are two options for the treatment of unsold NZUs in an auction. Under Option 1, unsold NZUs are simply added to the volume for sale in the next scheduled auction without limit. Under Option 2, the unsold volume is distributed among the remaining auctions in same calendar year.

Note, neither option allows for unsold NZUs from the last auction of the calendar year to be rolled over into the following year as volumes for that year are already fixed.

Option 1 minimises administration costs and is the simplest option for the auction operator. Administration costs would increase with more dynamic decision-making required if unsold units spread across the remainder of options (rather than simply rolled over into the next auction).

Options 1 and 2 both support market efficiency. Option 1 is simple as unsold units are simply rolled over to the next auction. However, there is some risk that if a number of sequential auctions result in unsold NZUs, a large volume of unsold NZUs could end up for sale in a single auction, potentially dampening prices. While Option 2 is more complex, it would limit the proportion of auction volume that can be 'rolled over'. This would help prevent oversupply in an individual auction, supporting market efficiency.

Other jurisdictions have used both options to treat unsold units.

**Table 2: Examples of managing unsold volume in other jurisdictions**

EU ETS	RGGI	WCI
In 2019, the EU ETS revised its auction regulations to allow unsold volumes to be distributed evenly over the next four auctions that do not already include unsold volume from previously cancelled auctions.	Member states may retire unsold allowances, otherwise these can be rolled over	Allowances unsold at previous auctions are rolled over to later auctions. These allowances are designated for an auction after two consecutive auctions have resulted in an auction price above the auction reserve price

### Operation of price controls within auctioning

The Climate Change Response (Emissions Trading Reform) Amendment Bill enables the implementation of price controls through the auctioning system:

- A cost containment reserve (CCR); and
- An auction price floor

Some price control settings will be determined separately from the Bill process when Cabinet considers the regulations for the unit supply settings of the NZ ETS. These include the level of the CCR price triggers and auction price floor, and the volume of the CCR. This impact statement assesses the rules that will define how these price controls operate in practice.

### Operation of the CCR

The CCR will release additional NZUs for sale at auction if the auction clearing price reaches a specified price trigger or triggers. The increase of supply into New Zealand’s carbon market will put downward pressure on unit prices.

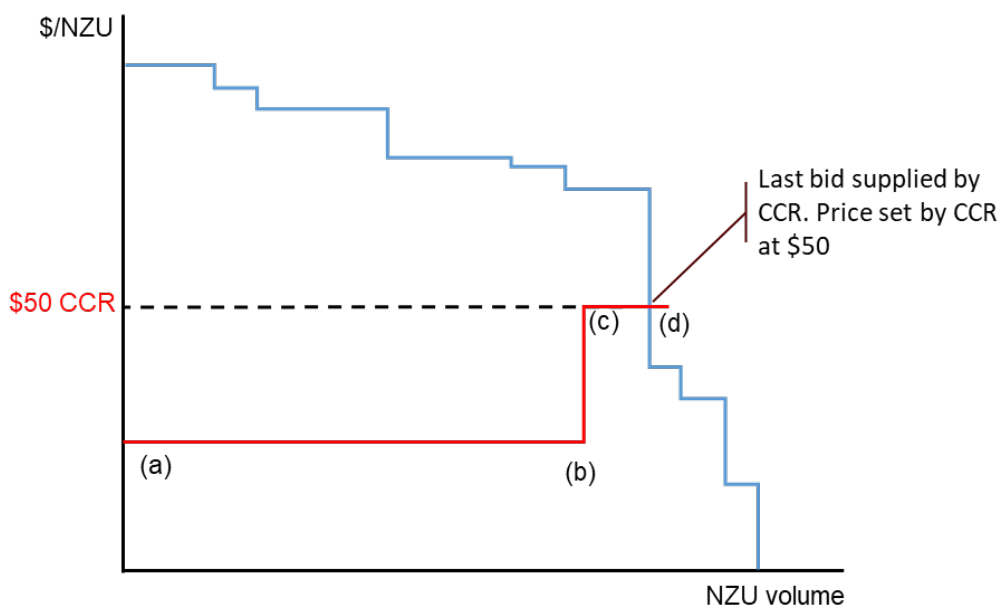
The Government consulted on three options for how the CCR would operate within auctioning:

- Option 1 – hold a separate CCR auction soon after the scheduled auction that activated the reserve, and is open to all registered auction participants
- Option 2 – hold a separate CCR auction soon after the scheduled auction that activated the reserve, and limits participation to entities with surrender obligations
- Option 3 – offer units from the cost containment reserve at the same auction that triggers the reserve.

Options 1 and 2 involve holding separate CCR auctions after the scheduled auction if the auction clearing price is above a price trigger. A CCR auction would follow the same format as scheduled auctions (i.e. a single round, sealed bid and uniform price). However, Option 2 would restrict participation to participants with surrender obligations in the NZ ETS. The rationale for limiting participation was to increase the probability of entities with compliance obligations being able to secure reserve NZUs. It could also minimise volume from the CCR being banked in accounts in the New Zealand Emissions Trading Register, as limited participation would imply bidders using reserve units to meet their NZ ETS surrender obligations.

Under Option 3, a separate CCR auction would not be held. Rather, NZUs from the CCR would be added to the volume of the scheduled auction where prices have cleared above the price trigger. Figure 1 shows how Option 3 would work when demand is met by the CCR.

Figure 1: Illustrative example of Option 3 with a single price trigger when demand is met

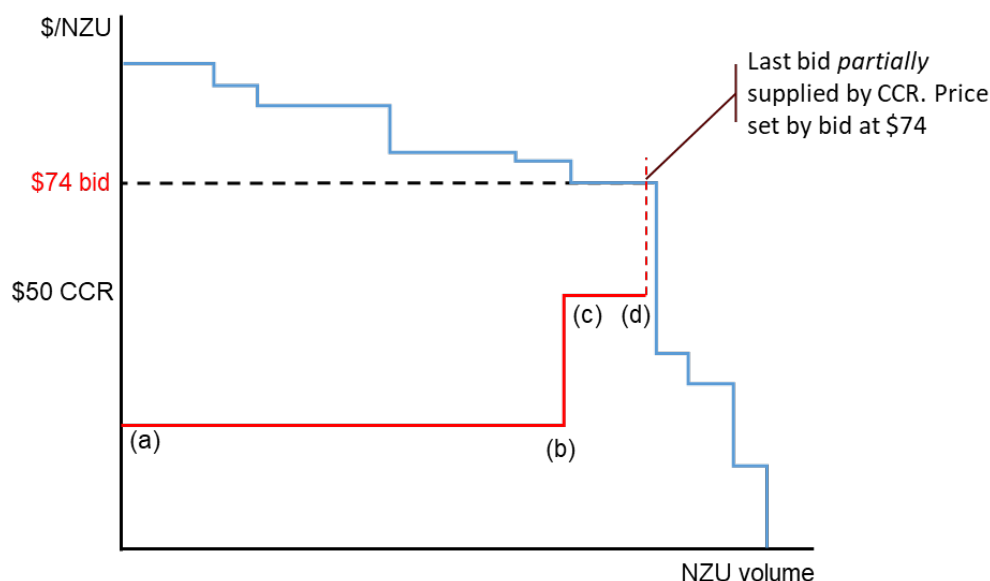




In Figure 1, the blue line is the demand curve created by bids. The red line is the supply curve created by first the auction volume (a) to (b) and then the CCR (c) to (d). The CCR price trigger is set at \$50, which is the level that the Government has consulted on. This level could change subject to final Cabinet decisions.

As all the demand above the CCR price trigger is met by the auction and CCR volumes, the clearing price for the entire auction is set at the level of the CCR price trigger (at \$50). Bids to the left of (d) that are below the clearing price are not met under this auction format. Figure 2 demonstrates what would happen when demand is not completely met by either the auction volume or the CCR.

Figure 2: Illustrative example of Option 3 with a single price trigger when demand is not met



In Figure 2, demand is not met by the volume of the CCR (c) to (d). The clearing price is set at the final bid price of \$74 that met by the volume of the CCR.

During consultation, the Government preferred Option 1 – a separate CCR auction with open participation. After considering feedback from submitters, officials revised the impact analysis from the Rules for Auctioning consultation document. The revised preferred option is that the Government offers units from the CCR at the same auction that triggers the reserve (Option 3). This is a simpler approach that enables the market to build in clear price expectations based on auction frequency and the value of the price trigger becomes the reserve price for that auction if the reserve volume is released. It could also significantly reduce the administration and transaction costs of making the CCR available at auction.

	Option 1: Separate reserve auction open to all registered auction participants	Option 2: Separate reserve auction limited to participants with surrender obligations	Option 3: Offer cost containment reserve volume within scheduled auctions
Minimise administrative and transaction costs	-	--	++
Ensure consistency and proportionality	+	-	0

<b>Support market efficiency</b>	++	+	++
<b>Preserve market integrity</b>	0	0	0
<b>Support transparency</b>	0	0	0
<b>Overall assessment</b>	Option 3 is preferred as it simple, has lower administrative and transaction costs and strongly supports market efficiency.		

Option 3 is preferred as it would only require the Government to operate scheduled auctions, as opposed to Options 1 and 2 where additional CCR auctions would operate if prices were unacceptably high. Option 3 would have significantly reduced administrative costs for the Government and auction operator, as well as transaction costs for bidders. There would also be reduced time costs as participants.

We assess that Option 1 would best ensure consistent and proportional access to the CCR. This is because a separate CCR auction with open participation allows for the widest range of entities to access the CCR. Option 2 restricts participation to businesses with surrender obligations in the NZ ETS, while Option 3 limits participation to those bidders that participated in the auction that triggered the reserve. Under Options 2 and 3, participants would not have access to the new volume, which is inconsistent.

All options strongly support market efficiency. Option 1 allows the market to respond to additional supply, effecting cost containment. It would also efficiently distribute cost containment reserve volume within the market. Option 2 would direct CCR units to participants with the greatest need, and eliminate the risk of this supply contributing to the NZ ETS unit stockpile (the large number of NZUs held in private accounts in the New Zealand Emissions Trading Register).

Option 3 supports market efficiency by increasing the probability of demand being met at a scheduled auction. It does this by adding reserve volume to an auction until either demand is met, or if the CCR is exhausted. It also ensures supply from the CCR is added to the market at the same time as a scheduled auction. This will allow the reserve to immediately effect cost containment when prices are unacceptably high.

#### *Single or multiple triggers CCR*

Two options were consulted on for the number of price triggers to activate the CCR:

- Option 1 – a single price trigger; and
- Option 2 – multiple price triggers.

Under Option 1, the full cost containment reserve volume would be available for sale if an auction clearing price was above the single price trigger. Option 2 would see a portion of the CCR volume released if an auction cleared above the first price trigger. Additional tranches would be released if ascending triggers are struck. The full volume would only be released if the highest price trigger was reached.

Decisions on the number of price triggers are out of scope and will be assessed through subsequent impact analysis on the NZ ETS unit supply settings.

### *Price floor*

The price floor is the minimum price at which NZUs may be sold at auction. Its level will be set through regulations. However, these regulations will be developed later with the unit supply settings. No further regulations are needed to operationalise a price floor.

## **Preparing for auctions; auction notices, registration process and provision of collateral**

### *Auction operator to publish auction notices and guidance for bidders*

Before an auction starts, the auction operator needs to provide confirmation to the market of the details of the upcoming auction via an auction notice. This would formally advise the market of the upcoming auction (note the date of the auction would already have been published in the auction schedule). The Government's preferred option is that the auction operator must publish an auction notice at least 30 calendar days prior to a scheduled auction date including at least the following information:

- date and time of the auction
- number of NZUs for sale at the auction
- any price controls that apply to the auction and their value (i.e. current value of the price floor, if enabled, current cost containment reserve price trigger value and the reserve volume available)
- any applicable due dates for forms, if required prior to the auction, e.g. for provision of collateral
- whether a technical reserve price applies to this auction
- give notice of whether the goods are being sold by the vendor as a supplier and state that vendor bids are not permitted.

Publishing the auction notice at least 30 calendar days before the auction should allow sufficient time for auction participants to prepare. This requirement would not preclude the auction operator from publishing earlier. Most consultation feedback noted that 30 days was sufficient to allow bidders and the auction operator adequate preparation time.

### *Registration process needed for bidders*

Eligible bidders need to register and then provide information to the auction operator to enable the auction to run efficiently. The auction operator will need time to verify bidder registrations before allowing them to participate in auctions. Once registered, bidders also need to meet the requirements set out in regulations and the terms and conditions of the auction, for example, any requirements to provide collateral, before submitting a bid at the auction. The Government has already decided that auctions will be open for participation to all New Zealand Emissions Trading Register (the Register) account holders, subject to further qualifications provided in regulations. The Government's preference is that the auction operator be authorised and required to collect the following information from prospective bidders in NZ ETS auctions:

- name of registered account holder
- registry account number to which the account holder wishes the units to be transferred
- for companies; full legal name, trading name (if different), company identifier or registration number

- principal business address or registered office address
- names, contact details and relationship to the account holder for any authorised representatives of the registered account holder
- names and contact details of each person authorised to bid in an NZ ETS auction on behalf of the registered account holder
- the auction operator verify that the Registry account number provided is a valid New Zealand Emissions Trading Register account and the prospective bidder is the registered account holder.
- the auction operator is required to verify that registration information is true and correct. Therefore I propose that alongside the information listed above, the prospective bidder be required to provide a statutory declaration.

Registration will be a one-time process that, once complete, will allow bidders to participate in all subsequent auctions provided they agree to the terms and conditions and periodically confirm that their registration details remain accurate. The option of requiring a separate intention to bid form for each individual auction was considered and consulted on, but is no longer preferred. The purpose of an intention to bid form is fulfilled by the registration and collateral requirements, and therefore there is no need to introduce further complexity to the auction system.

#### *Provision of collateral*

The Government consulted on whether or not to require bidders in NZ ETS auctions to provide collateral. Requiring collateral would help to manage the risk of a winning bidder defaulting on payment to ensure the credibility of the financial management system for NZ ETS auctions and preserve market integrity.

	<b>Option 1: Collateral is required</b>	<b>Option 2: Collateral is not required</b>
<b>Minimise administrative and transaction costs</b>	-	+
<b>Ensure consistency and proportionality</b>	+	0
<b>Support market efficiency</b>	+	-
<b>Preserve market integrity</b>	+	-
<b>Support transparency</b>	+	0
<b>Overall assessment</b>	The preferred option is that collateral is required	

There will be administrative and transaction costs for participants and the Government if collateral is required. However, there would also be considerable costs to the Government to pursue and resolve a default settlement if there was no collateral to set against the debt.

Costs for participants to submit collateral, and for the Government to receive, report on, and return collateral are a necessary part of running financial services such as auctioning, and is good industry practice to protect the integrity of the market.

Providing collateral will ensure bidders are committed to the auctioning process and the market will not be flooded with recreational or opportunistic bidders. It will also deter strategic behaviour if the winning bidder refuses to pay in circumstances where the auction clearing price exceeds the spot price in the secondary market.

The provision of some type of financial guarantee is standard industry practice. It is important that auctions are viewed as robust, credible, and a well-functioning part of the NZ ETS.

Requiring collateral to be provided can mitigate the risk of settlement default, ensure a level of commitment from bidders to deter frivolous bidding and increase public confidence in the integrity of auctions. Collateral provided during auctioning will be confidential to the bidder and the auction operator.

Consultation feedback on this topic was mixed, with a small majority supporting a requirement for collateral. Most submitters supported a requirement of between 10%-25% of a participant's maximum bid for the amount of collateral.

The Government's preference is that:

- Collateral must be provided for auctions at a rate of 25 per cent of a bid's maximum bid value, where maximum bid value equals the maximum price a bidder is willing to pay times the expected bid volume.
- Bids submitted by individual bidders will only be accepted by the auction operator if collateral requirements are met.
- If bidders amend their bid(s) during the bidding window, all amendments must stay within the limits set by the collateral provided. For example, if a bidder has provided more collateral than required for their initial bid(s) then they may amend their bid or bids upwards until 25 per cent of the new total maximum bid matches the collateral held by the auction operator, but no further.
- Collateral must be received by the auction operator five working days prior to the auction date. This does not mean the bidding window is also open for this five day period. Actual bids will only be able to be made on the day of auction, while the bidding window is open.
- Cash, bank guarantee or an irrevocable letter of credit will be accepted as collateral.
- Collateral may be used as partial payment for successful bids if requested by the bidder and the form of collateral provided allows for this.
- Bidders may request that their collateral be automatically returned after an auction or released only when requested.
- Non-cash forms of collateral may be retained for future auctions if requested by the bidder.
- Any remaining cash collateral will be returned after each auction.
- If successful bids are not settled by the settlement date then collateral provided for that bid will be forfeit to the Crown.

On balance the need to maintain the integrity of auctions outweighs the transaction costs and potential opportunity costs for bidders that arise from collateral requirements for the auction operator as they will be required to collect, hold, release and report on collateral.

**Bidding rules during an auction**

*Minimum bid*

The minimum bid is the smallest number of NZUs you can buy at an auction. The Government consulted on three options – 1,000 NZUs, 500 NZUs or 100 NZUs.

	<b>Option 1: 1,000 NZUs</b>	<b>Option 2: 500 NZUs</b>	<b>Option 3: 100 NZUs</b>
<b>Minimise administrative and transaction costs</b>	0	0	0
<b>Ensure consistency and proportionality</b>	-	+	+
<b>Support market efficiency</b>	+	+	-
<b>Overall assessment</b>	The preferred option is that the minimum bid size is 500 NZUs		

A lower minimum bid size will allow access to auctions for smaller bidders. Smaller bidders may currently encounter barriers to trading on the secondary market as it tends to support trading for larger bidders (through higher purchase minimums and price increments). This will support some participants with smaller surrender/repayment obligations to access the market without facing potentially higher costs by being required to use intermediaries.

Costs may vary slightly between the options if a smaller minimum bid size leads to increased number of participants bidding at auction. A higher volume of bidders increases the administration necessary to manage registration and collateral provided. A minimum bid size of 500 NZUs balances these considerations.

*Lot size*

Lot size is the number of NZUs packaged in one lot for auction. Bids for partial lots will not be accepted – for example, if the lot size is 500 NZUs, a bid for 450 NZUs will not be accepted. Three options were consulted on – lot sizes of 100 NZUs, 500 NZUs or 1000 NZUs.

	<b>Option 1: 1,000 NZUs</b>	<b>Option 2: 500 NZUs</b>	<b>Option 3: 100 NZUs</b>
<b>Minimise administrative and transaction costs</b>	0	0	0
<b>Ensure consistency and proportionality</b>	-	-	+
<b>Support market efficiency</b>	+	+	-
<b>Overall assessment</b>	The preferred option is a lot size of 100 NZUs		

Administrative costs would remain the same across all options, as processing the bidding results is automated. Feedback from consultation highlighted that a minimum lot size of 100NZUs would incentivise wider participation, and as a result this is the Government’s preferred option. Auction performance will be reviewed continually and if, after a few years, the lot size appears too low, then it may be increased.

*Price increments*

The price increment is the minimum price difference per NZU in which bids can be increased. The Government’s preferred option is bid increment of five cents (\$0.05) for NZ ETS auctions both because this is common practice in the secondary market and because it is small enough to lower the likelihood of tied bids. This was widely supported in consultation feedback.

	<b>Option 1: Small increment - \$0.01 or \$0.02</b>	<b>Option 2: \$0.05</b>	<b>Option 3: Larger increment - \$0.10</b>
<b>Minimise administrative and transaction costs</b>	0	0	0
<b>Ensure consistency and proportionality</b>	0	+	0
<b>Support market efficiency</b>	+	+	-
<b>Overall assessment</b>	The preferred option is increments of \$0.05		

*Technical reserve price*

A technical reserve price is the lowest price that the Government would be willing to accept for NZUs during any one particular auction. The technical reserve price is different from an auction price floor. The latter is a price control set in regulations, defined as the minimum price at which units may be sold at auction. The price floor is set at a fixed and publicly known value that does not change for every auction but remains in place until new regulations are made.

Setting a technical reserve price protects against the risk of NZUs being sold at a price significantly below the prevailing secondary market price. If that was to occur it could represent a windfall for auction participants at the expense of auction proceeds for the Crown, and potentially disrupt the secondary market. Consultation feedback showed support for implementing a technical reserve price.

The Government’s preferred option is to set a technical reserve price relative to the secondary market price of NZUs before each auction, using a prescribed methodology that is kept confidential. If the clearing price of any particular auction does not reach the technical reserve price for that auction then no units will be sold.

*Resolving tied bids in single-round, sealed bid, uniformly priced auctions*

In a single-round, sealed bid, uniformly priced auction, the auction clearing price is determined by ranking all bids received in descending order of price until the total bid volume (demand) is equal to (or greater than) the volume of units for sale (supply). The clearing price is set at the price of the lowest priced bid for the final amount of volume. Tied bids can occur when more than one bid is received that matches the clearing price of the auction and the total demand exceeds total supply. The Government consulted on three options for resolving these situations.

	<b>Option 1: Random assignment by bid</b>	<b>Option 2: Random assignment by lot</b>	<b>Option 3: Pro-rata re-scaling</b>
<b>Minimise administrative and transaction costs</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Ensure consistency and proportionality</b>	<b>-</b>	<b>0</b>	<b>+</b>
<b>Support market efficiency</b>	<b>0</b>		<b>0</b>
<b>Preserve market integrity</b>	<b>+</b>	<b>+</b>	<b>0</b>
<b>Support transparency</b>	<b>0</b>		<b>0</b>
<b>Overall assessment</b>	The preferred option is that tied bids are resolved using pro-rata rescaling		

The Government’s preferred option at consultation was option 2, where individual lots would be randomly chosen from the tied bids, and volume awarded accordingly. For example, each lot of 500 NZUs within all tied bids is randomly assigned a number, and the lots are awarded in an increasing order of those random numbers until no lots remain.

Consultation feedback showed wide support for option 3 on the basis that pro-rata resolution is seen to be fairer and because it is used in other markets. This option involves reducing all tie bids proportionately so that total demand equals supply. In this approach, tied bids would be resolved using a pro-rata approach rounded to minimum lot size as follows:

- Calculate for each tied bid the amount of NZUs that represents a proportionate share of all remaining auction volume.
- Round the volumes calculated above to the nearest minimum lot size, noting that this may result in zero NZUs being assigned if the proportionate share is less than half of the minimum lot size.

This is now the preferred option for resolving tied bids. This method is more likely to ensure that all bidders bidding at the clearing price will receive at least some units and also that the number of units received are in proportion to the size of their original bid.

*Amending and withdrawing bids*



Auctions are governed by the Fair Trading Act 1986, which sets out that bids must be allowed to be withdrawn up until the close of an auction and can be amended during that time (such as the price that has been bid). Participants can change their bids outside the bidding window at their discretion. This is also the practice for emissions trading schemes in other jurisdictions. This will allow participants to fix errors or change their minds about proceeding with a bid. No other participant is affected by amendments to bids in a sealed-bid format, and it does not affect the integrity of the auction.

*Considering a maximum bid limit*

A maximum bid limit is the maximum volume of units that could be bid for by any one bidder or by bidders that may be related through a group of companies.

	<b>Option 1: Set a maximum bid limit</b>	<b>Option 2: No maximum bid limit, but retain the option</b>
<b>Minimise administrative and transaction costs</b>	-	0
<b>Ensure consistency and proportionality</b>	+	+
<b>Support market efficiency</b>	0	0
<b>Preserve market integrity</b>	+	0
<b>Support transparency</b>	0	0
<b>Overall assessment</b>	The preferred option is that no maximum bid limit is set, but the option is retained	

The rationale for implementing a limit is that it would reduce the risk that participants facing surrender obligations are unfairly disadvantaged by someone bidding for a large portion of the available supply.

To deter market manipulation, the limit would need to apply to the total volume of bids made by any group of companies with a common ownership. As a result, participants would be required to provide information in their pre-registration application about all the companies they own, partially own, or exercise de jure or de facto influence on. This would create an administrative burden for participants and for the auction operator, who would need to collect and assess the information. A simpler option may be to apply the bid limit to all bids by a single participant; however, this may not fully address market integrity risks. At present, officials see this as a low risk given the level of supply to the market.

To reduce administration and ensure simplicity for bidders and the auction operator, the Government’s preferred option is to not set a limit at this time, but to monitor market behaviour and implement a limit in future, should it prove necessary.

**Settlement approach and reporting auction results**

*Auction settlement approach*

Settlement refers to the process whereby successful bidders pay for the bids they have won and then the corresponding number of NZUs are transferred to the bidder’s Registry account.

	Option 1: Payment before delivery	Option 2: Delivery versus payment (concurrent exchange)
<b>Minimise administrative and transaction costs</b>	+	-
<b>Ensure consistency and proportionality</b>	0	0
<b>Support market efficiency</b>	+	+
<b>Preserve market integrity</b>	+	+
<b>Support transparency</b>	0	0
<b>Overall assessment</b>	The preferred option is that payment is required before delivery	

The option of payment before delivery this require both the bidder and the auction operator to be members of, or use the services of, a central counter-party or clearing house to concurrently exchange payments from successful bidders with units from the auction operator, via the counter-party/clearing house. As the provider of these services would charge a fee, this would result in would have higher transaction costs than the payment before delivery approach.

As a result, the Government's preferred option is to require payment before delivery. This is a relatively simple approach that protects against defaults because transfers of NZUs are only initiated once payment has been received.

### *Reporting auction results*

The Government's preference is that the following information be published as soon as practicable after the end of each auction by the auction operator, at a minimum within the same business day:

- auction clearing price;
- total volume of units auctioned;
- total volume of bids;
- average bid size;
- number of bids;
- cover ratio (total volumes bid divided by total volumes for sale);
- total number of bidders and the number of successful bidders; and
- the number of unsold units, if any.

This will ensure that the wider market will receive information about the auction as soon as possible, so that the results can be reflected in trades on the secondary market. It is also important to ensure that the entire market has access to the information at the same time in order to prevent knowledge asymmetry.

### *Reporting auction results via the auction monitor*

Monitoring and reporting on auction results will increase transparency in the market and ensure all participants are informed appropriately about the results of each auction.

The Government's preferred option is that after each auction and prior to the next, the auction monitor when appointed, publishes a report on the outcome of the auction that contains at least the following information:

- detailed volume statistics, e.g. average volume per bidder , average volume won per bidder
- detailed statistics on the number of bids, e.g. average number of bids per bidder, number of bids submitted, number of successful bids
- relevant aggregate information, e.g. largest bids as a percentage of total volumes sold
- relevant distributional information, e.g. number of units awarded to which winner, with bidder names withheld
- distribution of successful bids among market participants with and without mandatory compliance obligations
- relevant information on resolved tied bids.

The auction monitor will review the auctioning system initially after the first year of operation and then biennially from then on.

## Section 5: Conclusions

### 5.1 What option, or combination of options is likely to best address the problem, meet the policy objectives and deliver the highest net benefits?

Preferred options for the auctioning system are set out in the impact analysis section above. Most of these preferences have not changed based on consultation feedback in late 2019 because further analysis has shown that they still line up with the criteria they are being assessed against.

Public consultation on the proposed rules for auctioning in the NZ ETS was conducted in November and December 2020. This consultation received 47 submissions from a wide range of stakeholders, the majority of whom were either ETS participants or actively involved in the ETS market. One submission was received from a submitter who identified as iwi/Māori. Iwi/Māori were invited to participate in consultation on these proposals alongside other stakeholders and notice of the consultation was included in a regular Ministry iwi newsletter during December 2019.

Stakeholders in general expressed support for the approach the Government is taking to develop regulations for auctioning. There was majority support for a significant number of the Government's preferred proposals, with a range of views expressed on some of the more technical proposals.

The preferred options for how the cost containment reserve operates, the method for resolving tied bids and the minimum lot size have changed based on consultation feedback and further analysis.

Following consultation and subsequent analysis, officials revised the preferred option for the format of the CCR. The new preferred option is that volume from the CCR is released into the scheduled auction that triggered the reserve. We now assess that this is the simplest format for the CCR that will reduce administration and transaction costs, and support market efficiency.

The preferred method for resolving tied bids is now a pro-rata approach, as submitters felt this was the fairest option, and because this method is used in other markets.

A minimum lot size of 100 NZUs rather than 500 NZUs is now preferred as this option may facilitate wider participation in auctions.

Some submitters raised concerns about the potential impact of auctioning on NZ ETS unit supply. A small number of forestry participants submitted that auctioning would undermine the integrity of NZUs awarded for emissions removals from production forests. Officials are actively considering these issues; however, we think they are better addressed through the process to develop regulations for the NZ ETS supply settings. The package of auctioning rules presented in this impact statement will ensure a credible and fit-for-purpose auctioning system that supports the integrity of the NZ ETS. An efficient auctioning system that supports market efficiency will help minimise disruptive unit supply impacts.

Auctioning units directly from the Government to bidders is a new function for the NZ ETS. However over several years developing these proposals we have commissioned external reports, consulted and engaged multiple times with stakeholders and have looked at how

auctions operate in emissions trading schemes in overseas jurisdictions. Therefore we are confident that the proposals for these rules are a good starting point for auctioning in the NZ ETS. The auctioning platform will mature over time and that is one reason why the majority of these rules are set in regulations rather than primary legislation, to allow for future development.

## 5.2 Summary table of costs and benefits of the preferred approach

Affected parties (identify)	Comment: <i>nature of cost or benefit (eg, ongoing, one-off), evidence and assumption (eg, compliance rates), risks</i>	Impact <i>\$m present value where appropriate, for monetised impacts; high, medium or low for non-monetised impacts</i>	Evidence certainty (High, medium or low)
<b>Expected benefits of proposed approach compared to taking no action</b>			
Regulated parties	<p>Auction participants will benefit from auctions being simple, time efficient, and designed to complement the secondary market. They will also benefit by understanding the rules that are in place for NZ ETS auctions. For prospective bidders, this enables them to participate in the market, know what is required of them and develop bidding strategies. A wide group of participants are eligible to bid in auctions, which benefits all who are seeking a liquid, well supported, credible auction market.</p> <p>For the auction operator, they understand Government requirements for running and managing the auctions, including their role and responsibilities as the operator of the auction platform.</p>	<p>Provides a consistent source of NZUs for NZ ETS participants to meet obligations.</p> <p>Auction system ensures efficient price discovery, which means bidders will receive auctioned units at fair market value.</p>	Medium
Regulators	<p>Having clearly defined rules that are designed to reduce risks of collusion and be transparent to all participants will help reduce the risk of collusion in the market. Clearly defining the role of the auction operator and auction monitor will also support the integrity of the NZ ETS system.</p>	<p>Auction operator cost: \$1.303 million appropriated in Budget 19 to establish and build the auctioning platform, and \$1.646 million per annum to operate the system.</p> <p>Potential total auctioning proceeds in 2020 and over the first emissions budget period (2021-2025) of \$2.05 billion (assuming a NZU price of \$25).</p>	Medium

Wider government	Efficiency of the NZ ETS, and the functionality of auctioning allows the NZ ETS to cost effectively reduce emissions, therefore helping the Government (and New Zealand) to meet its climate change targets and objectives.	By helping New Zealand efficiently meet 2030 under Paris Agreement, auctioning could reduce the cost to the Government of procuring offshore mitigation to meet the target.  Auctioning will help establish a price signal in New Zealand that drives the right level of mitigation. This will ensure that the cost impact of the NZ ETS on the economy is managed.  Increases liquidity of New Zealand's carbon market.	Medium
Other parties			
<b>Total Monetised Benefit</b>		Potentially \$2.05 billion to the Crown from auctioning proceeds. Note: the accounting treatment of NZUs is complex, including the treatment of auction proceeds.	Medium
<b>Non-monetised benefits</b>		An efficient and well-functioning auctioning system that supports the Government's climate change objectives.	Medium

### Additional costs of proposed approach compared to taking no action

Regulated parties	They will bear costs to participate in the auction, including by learning how to participate in auctioning, registering and then meeting requirements to bid. Costs will be lower than if the rules were not clearly defined and designed to keep the system simple.	Minimum cost of purchasing units of \$12,500 (assuming a NZU price of \$25).  Minimum collateral cost of \$3,125 (assuming a NZU price of \$25).  Time cost associated with providing initial registration information (once per bidder).	Medium
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		Time cost with developing bidding strategies.	
Regulators	The approach to setting the rules for auctioning has been to design rules that are simple to understand, clearly define how auctions will run to develop a well-regulated, transparent auction platform. Provision of information and regular reporting from both the auction operator and monitor are designed to help regulators understand the impact of regulations and monitor ongoing market behaviour.	Medium	Medium
Wider government	The Government is currently running a competitive tender process to appoint the auction operator and establish the auctioning platform. There is no further fiscal impact of these rules on these costs as they are already budgeted for.	Low	High
Other parties			
<b>Total Monetised Cost</b>	The auctioning rules are required to implement previous Cabinet decisions, therefore funding to establish the auctioning platform is already in place. No further costs are incurred by the Government as a result of these decisions.	Low	High
<b>Non-monetised costs</b>		Unclear	Medium

### 5.3 What other impacts is this approach likely to have?

N/A

## Section 6: Implementation and operation

### 6.1 How will the new arrangements work in practice?

The rules for auctioning will be given effect through regulations. These regulations will be progressed throughout 2020 and implemented by the end of 2020. This timeframe will allow auctioning to commence in 2021.

Under sections 6A and 30G of the CCRA, the Minister for Climate Change has powers to make regulations to sell NZUs by way of auctioning.

New sections 30GA to 30GG of the Climate Change Response (Emissions Trading Reform) Amendment Bill set out the types of decisions that the Minister for Climate Change will need to make when recommending that auctioning regulations be made. It also provides for regulations to be made to appoint an auction monitor.

Pending enactment of the Bill to amend the CCRA, these regulations will be given effect through implementation of the auctioning platform, appointment of the auction operator and appointment of the auction monitor.

The Ministry for the Environment is running a competitive tender process to appoint the auction operator and establish the auctioning platform. The auction operator will be appointed during 2020 with a view to starting auctions in early 2021. Once the auction operator is appointed, they will be responsible for registering NZ ETS participants who wish to bid in auctions, establishing the auction platform, running the auctions and reporting on auction results. The Government intends to work with the auction operator to offer training in the auctioning system to NZ ETS participants before auctions begin.

The auctioning platform is required to interface with the NZ ETS Registry that is operated by the Environmental Protection Authority (EPA). Details of this interface will be worked through with by the Ministry for the Environment, the EPA and the auction operator once appointed.

Appointment of the auction monitor requires further regulations to be enacted. The independent auction monitor will oversee auctions in New Zealand. The auction monitor will monitor auction results and publish a report on auction outcomes, and periodically assess the auction system, to make recommendations for improvement or monitor the conduct of participants and the auction operator. Further analysis on the auction monitor will be carried out in a subsequent impact statement when final decisions are being made.

### 6.2 What are the implementation risks?

These regulations are required to set the rules for auctioning. However, for auctioning to begin, further regulations are required to set auction volumes, the value of price controls to be used during auctions and define the first auction schedule. Proposals to set these regulations are under consideration following recent consultation on NZ ETS proposed settings. Together the two sets of regulations form a package and if there is a delay on decisions for the second set of proposals then this risks delaying the start of auctioning and the implementation of these regulations.

The enabling provisions for these regulations are currently within the Bill that is before Select Committee rather than in the CCRA. There is a risk that if the Bill is not enacted then



auctioning regulations cannot be set and auctioning cannot begin. However this risk is considered to be low.

As a relatively large, new function, the development of the auctioning platform incurs the standard risks expected with any large procurement or build of an IT-type project. Due to the busy climate change work programme and cross-agency nature of the project, these risks may be slightly higher than in other contexts. These risks will be managed separately as part of those projects.

## Section 7: Monitoring, evaluation and review

### 7.1 How will the impact of the new arrangements be monitored?

The Government has decided to enable the appointment of an independent auction monitor to oversee auctions in the NZ ETS, and the Climate Change Response (Emissions Trading Reform) Amendment Bill provides for regulations to be made to appoint an auction monitor.

More specifically, it has been decided that the auction monitor must monitor auction results and publish a report on auction outcomes. The auction monitor may also periodically assess the auction system, to make recommendations for improvement or monitor the conduct of participants and the auction operator, if required. This independent oversight would mitigate the risk to the integrity of auctions.

These proposals will likely be reassessed as part of the development of a market governance framework for the NZ ETS. Proposals for regulations relating to the auction monitor will be brought to Cabinet separately later in 2020.

### 7.2 When and how will the new arrangements be reviewed?

The independent auction monitor will conduct a review of the auctioning system after the first year of operation, and then biennially after that (once every two years).

*What sort of results (that may become apparent from the monitoring or feedback) might prompt an earlier review of this legislation?*

If the reporting or monitoring by the auction operator brings to light evidence of market manipulation then this may prompt an earlier review. Similarly, if evidence emerges that the regulations are proving to be unworkable in practice or are having unforeseen impacts on market integrity or participation then a review may be prompted.

*What opportunities will stakeholders have to raise concerns?*

Once appointed, the Government intends to work with the auction operator to educate participants about the auction platform prior to the start of auctioning. This may involve running workshops or pilot auctions. This will give stakeholders a further opportunity to engage with how the regulations will work in practice and provide feedback on their impact.

## Appendix 1: Overall rules for scheduling auctions and managing volume across auctions

Summary of proposals	Submitter views
Auctions calendar	<p>Submitters provided a range of suggestions regarding how and when to schedule auctions. They generally agreed that auctions should be scheduled during the week, avoid major holidays and key announcement dates. Some suggested specific day ranges, for example suggesting holding auctions at the end of the month or during the first five days of the month to align with business practices or mid-week to avoid public holidays.</p> <p>Submitter views were mixed on how close to the compliance deadline an auction should be scheduled. Several suggested that ten working days should be sufficient, while others said a gap of at least a month was needed, even if auctions were to be held monthly.</p>
Auction bidding window	<p>Most submitters (26) agreed that a three-hour bidding window in the morning was appropriate. Of the six who did not agree there was a preference to have a later start time to allow international bidders more time.</p>
Distribution of volume across auctions.	<p>Most submitters (28) supported the even distribution of volume for reasons of simplicity and predictability. The submitters that disagreed generally had surrender obligations and preferred an approach that increased volumes for sale between January and April each year prior to the surrender date in May.</p>
Treatment of unsold units	<p>Submitters had differing views on how to treat unsold units. Those supporting a limit on the number of unsold units that could be added to subsequent auctions felt this would be more effective in avoiding disruption to the secondary market. Those who did not support a limit expressed a preference for certainty over the volume that would be available at each auction and across the calendar year. Several submitters thought it unlikely that any NZUs would be unsold in the current market. Some submitters also suggested that unsold units could be added to the cost containment reserve, particularly if units are left unsold at the end of a calendar year.</p>

### *Operation of price controls within the auctioning system*

Cost containment reserve format	<p>Submitter views were evenly split over the best option for releasing the cost containment (CCR) reserve to the market (10 supported a separate CCR auction, 10 supported a separate CCR auction with restricted participation, and 10 supported releasing CCR volume in the same auction that triggered the reserve).</p> <p>Those who supported releasing the reserve volume immediately submitted that this option is simpler, cheaper and more efficient</p>
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	<p>because no separate auction needs to be held. They also noted that this would better prevent bidders paying unacceptably high prices in the original auction.</p> <p>Submitters who supported the Government's original preferred option to hold a separate reserve auction without limiting participation, generally agreed with the rationale that this would support accessibility. Some noted that it would be important to keep the time between the original and reserve auctions short to minimise uncertainty and reduce the impact on the secondary market.</p> <p>Submitters who supported restricting participation in the reserve auction to entities with surrender obligations were concerned that an open auction may encourage speculation and make it difficult for those with compliance obligations to access supply.</p>
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*Preparing for auctions; auction notices, registration process and provision of collateral*

Publication of auction notice	<p>The majority of submitters who commented on the lead time required for auction notices said that 30 days should be sufficient regardless of auction frequency (15). However some suggested this may need to be shortened for monthly auctions.</p>
Registering for an auction	<p>Submitters had a range of views on the registration process. Some larger companies felt that a rigorous vetting and due diligence process is warranted to ensure the integrity of auctions. Other submitters thought it sufficient to rely on information already held in the Registry for registration and saw no need for further checks.</p> <p>Submitters commonly expressed the view that providing an intent to bid form for each individual action should not be required (20). They viewed it as an administrative burden that was not a binding indication of an intention to bid and considered it unnecessary. If an intention to bid form is required then these submitters felt that only a short lead time needed, from one to five days before the auction.</p>
Collateral	<p>A small majority of submitters supported proposals to require collateral (19). However, there were a number of organisations who did not agree that collateral was needed. Some suggested that different types of bidders should face different collateral requirements, for example that bidders with surrender obligations should not need to provide collateral but should require collateral from those with no obligations.</p> <p>There was broad support for the Government preferred value for collateral of between 10 and 25 per cent of the maximum bid, and for the Government's preferred lead time for collateral of five working days (15). A minority preferred the option of 100 per cent collateral and some submitted it could then be used to immediately settle bids.</p>

Acceptable forms of collateral	Submitters generally agreed that cash, bank guarantees and irrevocable letters of credit should be acceptable forms of collateral. There were a few other suggestions to increase these options (either now or in future phases of development of the auctioning system). Suggestions included accepting NZUs as collateral, using credit ratings or that collateral obligations could be removed for bidders with proven payment records in prior auctions.
Flexibility for how collateral is treated	Submitters almost universally supported flexibility when asked whether bidders should be able to choose what happens to collateral after an auction closes (20). They largely agreed that collateral (depending on its form) should be used against payment if the bidder requests and that bidders should be able to choose to have their collateral either automatically returned after the auction, released at their request, or retained for future auctions (27).

*Bidding rules during an auction*

Bid and lot size	<p>There was a range of views from submitters on the preferred minimum bid size. Support was evenly split between those who supported the preferred option of 500 NZUs (13) and those who preferred a larger minimum of either 1000 (10) or 5000 (4) NZUs to align with the secondary market. The few who supported a smaller bid size submitted that this would make auctions more accessible for small scale participants.</p> <p>Support was similarly split on a minimum lot size, with the majority of submitters supporting either 100 (11) or 500 (11) NZUs. Nine submitters supported a larger lot size of either 1000 or 5000 NZUs.</p>
Price increments	Larger and smaller increments were considered, however most submitters who commented supported an increment of \$0.05 (21).
Technical reserve price	<p>A majority of submitters supported the introduction of a technical reserve price (22). Those commenting in support agreed with the Government’s rationale that this would ensure units are not sold below their market value.</p> <p>Submitters who opposed the technical reserve price (10) noted either that it was not needed in the presence of a price floor or that if one were set then it may be hit if prices on the secondary market spiked quickly, creating the risk that units are unsold in a market where demand is actually high. However, the risk of this occurring is deemed to be low if the reserve price methodology is based on the current price in the secondary market rather than a recent average.</p> <p>Submitters were evenly split on whether the methodology for calculating the clearing price should be kept confidential (15 in favour, 13 opposed). The most common rationale of those opposing confidentiality was to increase transparency. While transparency is a guiding principle of the NZ ETS, in this case the</p>

	need for transparency is outweighed by the risk that publication may encourage attempts at market manipulation.
Tied bids	<p>Submitter views were slightly in favour of the pro-rata approach (18), primarily for equity reasons and because it is easier for bidders to understand. Several also submitted that this matches the approach taken in some financial markets.</p> <p>Those favouring either of the random assignment approaches (13) were more likely to do so as a way of preventing undesirable market behaviour or because the approach is simple and is used in international markets (random assignment to the entire bid).</p>
A maximum bid limit	There was some support from submitters to set a limit (15). The main rationale was that this would reduce the risk that participants facing surrender obligations are unfairly disadvantaged by someone bidding for a large portion of the available supply.

*Settlement approach and reporting auction results*

Settling successful bids	Submitters overwhelmingly supported the payment before delivery approach (30) for reasons of simplicity and minimising transaction costs, with only one submitter suggesting an alternative approach.
Auction monitor reporting of auction results	Most submitters were supportive of the listed information being published. A few suggested that there may be limited value in publishing average bid sizes and number of bids as these will vary greatly depending on bidder strategies.
The auction monitor should also publish regular reports following each auction, and regularly review the auctioning system.	<p>Generally submitters were supportive of the listed information being published, provided care was taken to avoid identification of individual bidders inadvertently.</p> <p>Most submitters were supportive of the role of the auction monitor, and the majority agreed with the recommended frequency of reviews, i.e. after the first year of operation initially and biennially thereafter (16). Where submitters disagreed with the frequency of reviews they tended to prefer a more frequent review schedule, e.g. six monthly at first then annually or annually (9).</p>